ANNUAL INDEX

for Vol. 46-1957

Apprenticeship
Selecting the Best Qualified for Carpentry Apprenticeships, W. F. Patterson, 101

Architectural Drawing
Planning Aid for Architectural Drafting, A, Homer A. Mattson, 7

Automation
". . . And the Problems of Life Related to These Changes . . . ," Carl Gerbracht and Frank A. Scholfield, 113

Auto Mechanics
Car Inspection for Safety, William B. LaPorte, 20A (November)
Objectives of an Auto Shop Program, A. C. Vasis, Jr., 208
Planned Tool Panel for the Auto Mechanics Area, A, John D. Ehrenborg, 193
Sign for Driver Training Cars, A, Robert D. Hogan, 103

Birdhouses
Sheet Metal Birdhouse, Herbert W. Yankee, 55

Bruce's School Shop Annual
Are We Planning Functional School Shops?, J. H. Douglass, 82
Clamp Rack, A, Alfred E. Owens, 94
College Trade Department Takes Inventory, A, W. W. Ludeman, 88
Community High School Shop, C. H. Bergman, 75
Exchange Unit Between Shop and Homemaking Classes, James Crawford, 95
Experience in Co-operative Shop Planning, An, Robert D. Brown, 76
General Metal, Electricity, and Ceramics Shops, Ralph O. Gallington, 66
General Woods and Crafts, Ralph O. Gallington, 72
Graphic Arts Shop, Ralph O. Gallington, 72
Interpretation of Industrial Arts in the School Community, Hilary Blanton Ford, 112
New Dunbar Vocational High School, The, Clifford J. Campbell and Claybourne H. Norris, 57
New Facilities in Vocational Agriculture, Harry T. Miller, 85
New Junior High School Industrial Arts Buildings, William B. Steinberg, 67
Planning Industrial-Arts Shops at Ballston Spa, W. T. Jones and Joseph Fruehwirth, 73
Pueblo High School Shops, Herman R. Berlowe, 86
Radio, TV, and Electronics Shop, Jack B. Brown, 63
School Plant and Equipment, David Peyton, 93
Selecting the Best Qualified for Carpentry Apprenticeships, W. F. Patterson, 101
Shop Layout for Addition to Defiance High School, Lester Riggle and Harry Manahan, 103
Sign for Driver Training Cars, A, Robert D. Hogan, 103
Tacoma Vocational School Addition, Karl B. Kluge, 96
Vocational Education at Haverhill, Mass., Thomas Garvey, 105
Word About the College Degree, A, Everett R. Miller, 92

Cartoons
Cartoon, William S. Hanks, 114
Cartoon, Calvin T. Scott, 285
Lunkhead Louie, Louis J. Enos, 22, 26A (March)
Shop, Look and Listen, Al Marino, 39, 48

Ceramics and Plastics
General Metal, Electricity, and Ceramics Shops, Ralph O. Gallington, 66
Lazy Susan, Paul G. Hausman, 257
Plastic Tumbler Lamp, Alvin R. Lappin, 326

Co-operative, Distributive, Consumer Education
Mass Production Technique of Teaching Industry, The, Harvey Schaffer, 309

Course Outlines
Integrated Industrial-Arts Program for the Junior High Schools, An, Donald L. Lippold, 37

PAGES IN EACH ISSUE

January	1– 28
February	29– 56
March	57–112
April	113–142
May	143–174
June	175–204
September	205–234
October	235–276
November	277–308
December	309–338

Operation Interest, K. T. Olsen, 137
Two-Year Industrial Arts Woodworking Course, A, William L. Lewis, 41

Design and Drafting (Architectural and Mechanical)
Camp Stove, Walter H. Harrington, 49
Darkroom Press, John Emmel, 52
Design in Industrial Arts, Alexander F. Bick, 320
Designing is Problem Solving, Herbert A. Anderson, 211
Drafting Machine Training in the School, Robert A. Goulder, 282
Drafting Pencil — A Teaching Aid, Stanley Ross, 52
Dry Mounting Process and Industrial Arts, The, Fred A. Olsen, 307
How to Make and Use a Dry Diazo Developing Unit, Lawrence S. Wright, 226
Keeping Drawings Clean, Andrew Verkade, 13
Making a Masking Tape Board, Stanley D. Ross, 56
New Experiment for Industrial Arts, A, Alexander F. Bick, 158
Professional Design in School Shops, Alexander F. Bick, 46
Project Design for Shop Teachers, Alexander F. Bick, 125
Reproduction of Shop Drawings, Lawrence S. Wright, 123, 151, 182, 218, 291, 316
Teen-Age Planners, Clarence Cullimore, 286
Typical Specifications for a Residence — I, N. M. Pittman, 334
Wire Models for the Drafting Room, Thomas J. Minter, 229

Editorials
AIAA Convention at Kansas City, Mo., 122
Area Vocational Education, 292
Aristocratic Bricks, 157
AVA Convention, 1957, 184
Closing Up the School Shop, 184
First Semester is Coming to Its End, The, 40
Getting Your Money's Worth Out of the Schools, 292
Helping Fellow Teachers, 40
Industrial Arts and Skill, 292
Industrial Growth of the Steel Industry, 12
Is Your Shop Safe Against Fires?, 292
Men and Steel, 322
Opportunity Unlimited — A New TV Series, 322
Planning the Shop Work, 219
Prepare Your Boys to Practice Safety, 40
Reminders for the First Day, 219
Requisition Time, 157
Speed Kills, 12
Summer School Offerings, 157
Teach Accident Prevention — On the Highway, in the Home, and on the Job, 246
To Make the School Year 1957–58 Successful, 219
To You and Yours, 12
Uncommon Altruism, 12
Vocational Education in Pakistan, 246
Week or Two Before Christmas, The, 12
What to Do in Case of Fire, 122
Worthwhile Club Work, 40
Your New Permanent Address, 184

Electricity
Bookholder, M. L. Zanco, 333
Electric Wiring Board, Bernard Myers, 198
General Metal, Electricity, and Ceramics Shops, Ralph O. Gallington, 66
Isolated A.C.-D.C. Supply, An, George P. Pearce, 15
Lamp Building Project, Normand Methot, 233
Length of Wire on a Spool, George P. Pearce, 138
Multiple Electrical Teaching Aid, Clarence Parry, 259
Plastic Tumbler Lamp, Alvin R. Lappin, 326
Portable Space Heater, M. D. Roberts and W. O. Satterley, 302
Pseudo-Ebony Lamp Base, Richard M. Birch, 126
Radio, TV, and Electronics Shop, Jack B. Brown, 63
Record Player for the General Shop, A, M. D. Roberts and W. O. Satterley, 163
Shop Kink to Be Used on Wood Lamps, A, V. C. Knepper, 16
Wishing Well TV Lamp, Brother Leo Geiger, C.S.C., 324

Exhibits
It Pays to Display, Arthur A. Dick, 120

Farm Shop
New Facilities in Vocational Agriculture, Harry T. Miller, 85

General Shop and Home Mechanics
Experience in Co-operative Shop Planning, An, Robert D. Brown, 76

Guidance (Vocational Education, etc.)
Evaluation of Industrial Arts Guidance Services, Warren M. and Wallace M. Maurer, 317

Hobbies
Whittling Project — Mourning Dove, Ben Hunt, 327
Whittling Project — Trumpeter Swan, Ben Hunt, 295
Whittling Project — Woodcock, Ben Hunt, 254

Industrial Arts
". . . And the Problems of Life Related to These Changes," Carl Gerbracht and Frank A. Scholfield, 113
Doctor's and Master's Degrees with Theses in Industrial Education 1930 to 1955, Ray C. Doane and H. H. London, 115
Evaluation of Industrial Arts Guidance Services, Warren M. and Wallace M. Maurer, 317
Exchange Unit Between Shop and Homemaking Classes, James Crawford, 95
Ford Industrial Arts Awards, The, 217
Increasing High School Industrial-Arts Enrollment, John E. Cogoli, 34
Industrial Arts and Consumer Education, Garfield Burnham, 149
Industrial Arts and Public Relations, D. F. Cantrell, 275
Industrial Arts in Puerto Rico, Ferdinand F. Rossi, 214
Industrial Arts in the Education of Delinquents, Norman W. Bedwell, 148
Industrial Arts Inventory and Purchasing, Jules Bertin, 143
Industrial-Arts Shop Potential, The, Alexander F. Bick, 269
Industrial Education in Harford County, Md., John R. Walker, 145
Integrated Industrial-Arts Program for the Junior High Schools, An, Donald L. Lippold, 37
Mass Production Technique of Teaching Industry, The, Harvey Schaffer, 309
Mid-Term and Final Reviews, E. J. Terrell, 183
New Approach to Library Book Selection, A, Bert Mason, 8
New Experiment for Industrial Arts, A, Alexander F. Bick, 158
Open House for the Faculty, John A. Hielsberg, 156
Organization — The Key to Good Discipline, Fred A. Olsen, 174
Outside-of-School Industrial-Arts Assignments, Bernard Wray, 32A (May)
Potentialities of a Pupil Personnel Organization, Donald G. Lux and Edward R. Towers, 152
Program in Manual Arts Therapy, A, Robert E. Smith, 281
Project Design for Shop Teachers, Alexander F. Bick, 125
Rubber Stamp Vulcanizing Press, Robert W. Cynar, 278
TV's Challenge to Industrial Arts, Robert V. Esmond, 242
Versatility of Basic Shop Materials, The, Alexander F. Bick, 14

ANNUAL INDEX

for Vol. 46-1957

Apprenticeship
Selecting the Best Qualified for Carpentry Apprenticeships, W. F. Patterson, 101

Architectural Drawing
Planning Aid for Architectural Drafting, A, Homer A. Mattson, 7

Automation
". . . And the Problems of Life Related to These Changes . . . ," Carl Gerbracht and Frank A. Scholfield, 113

Auto Mechanics
Car Inspection for Safety, William B. LaPorte, 20A (November)
Objectives of an Auto Shop Program, A. C. Vasis, Jr., 208
Planned Tool Panel for the Auto Mechanics Area, A, John D. Ehrenborg, 193
Sign for Driver Training Cars, A, Robert D. Hogan, 103

Birdhouses
Sheet Metal Birdhouse, Herbert W. Yankee, 55

Bruce's School Shop Annual
Are We Planning Functional School Shops?, J. H. Douglass, 82
Clamp Rack, A, Alfred E. Owens, 94
College Trade Department Takes Inventory, A, W. W. Ludeman, 88
Community High School Shop, C. H. Bergman, 75
Exchange Unit Between Shop and Homemaking Classes, James Crawford, 95
Experience in Co-operative Shop Planning, An, Robert D. Brown, 76
General Metal, Electricity, and Ceramics Shops, Ralph O. Gallington, 66
General Woods and Crafts, Ralph O. Gallington, 72
Graphic Arts Shop, Ralph O. Gallington, 72
Interpretation of Industrial Arts in the School Community, Hilary Blanton Ford, 112
New Dunbar Vocational High School, The, Clifford J. Campbell and Claybourne H. Norris, 57
New Facilities in Vocational Agriculture, Harry T. Miller, 85
New Junior High School Industrial Arts Buildings, William B. Steinberg, 67
Planning Industrial-Arts Shops at Ballston Spa, W. T. Jones and Joseph Fruehwirth, 73
Pueblo High School Shops, Herman R. Berlowe, 86
Radio, TV, and Electronics Shop, Jack B. Brown, 63
School Plant and Equipment, David Peyton, 93
Selecting the Best Qualified for Carpentry Apprenticeships, W. F. Patterson, 101
Shop Layout for Addition to Defiance High School, Lester Riggle and Harry Manahan, 103
Sign for Driver Training Cars, A, Robert D. Hogan, 103
Tacoma Vocational School Addition, Karl B. Kluge, 96
Vocational Education at Haverhill, Mass., Thomas Garvey, 105
Word About the College Degree, A, Everett R. Miller, 92

Cartoons
Cartoon, William S. Hanks, 114
Cartoon, Calvin T. Scott, 285
Lunkhead Louie, Louis J. Enos, 22, 26A (March)
Shop, Look and Listen, Al Marino, 39, 48

Ceramics and Plastics
General Metal, Electricity, and Ceramics Shops, Ralph O. Gallington, 66
Lazy Susan, Paul G. Hausman, 257
Plastic Tumbler Lamp, Alvin R. Lappin, 326

Co-operative, Distributive, Consumer Education
Mass Production Technique of Teaching Industry, The, Harvey Schaffer, 309

Course Outlines
Integrated Industrial-Arts Program for the Junior High Schools, An, Donald L. Lippold, 37

PAGES IN EACH ISSUE

January	1– 28
February	29– 56
March	57–112
April	113–142
May	143–174
June	175–204
September	205–234
October	235–276
November	277–308
December	309–338

Operation Interest, K. T. Olsen, 137
Two-Year Industrial Arts Woodworking Course, A, William L. Lewis, 41

Design and Drafting (Architectural and Mechanical)
Camp Stove, Walter H. Harrington, 49
Darkroom Press, John Emmel, 52
Design in Industrial Arts, Alexander F. Bick, 320
Designing is Problem Solving, Herbert A. Anderson, 211
Drafting Machine Training in the School, Robert A. Goulder, 282
Drafting Pencil — A Teaching Aid, Stanley Ross, 52
Dry Mounting Process and Industrial Arts, The, Fred A. Olsen, 307
How to Make and Use a Dry Diazo Developing Unit, Lawrence S. Wright, 226
Keeping Drawings Clean, Andrew Verkade, 13
Making a Masking Tape Board, Stanley D. Ross, 56
New Experiment for Industrial Arts, A, Alexander F. Bick, 158
Professional Design in School Shops, Alexander F. Bick, 46
Project Design for Shop Teachers, Alexander F. Bick, 125
Reproduction of Shop Drawings, Lawrence S. Wright, 123, 151, 182, 218, 291, 316
Teen-Age Planners, Clarence Cullimore, 286
Typical Specifications for a Residence — I, N. M. Pittman, 334
Wire Models for the Drafting Room, Thomas J. Minter, 229

Editorials
AIAA Convention at Kansas City, Mo., 122
Area Vocational Education, 292
Aristocratic Bricks, 157
AVA Convention, 1957, 184
Closing Up the School Shop, 184
First Semester is Coming to Its End, The, 40
Getting Your Money's Worth Out of the Schools, 292
Helping Fellow Teachers, 40
Industrial Arts and Skill, 292
Industrial Growth of the Steel Industry, 12
Is Your Shop Safe Against Fires?, 292
Men and Steel, 322
Opportunity Unlimited — A New TV Series, 322
Planning the Shop Work, 219
Prepare Your Boys to Practice Safety, 40
Reminders for the First Day, 219
Requisition Time, 157
Speed Kills, 12
Summer School Offerings, 157
Teach Accident Prevention — On the Highway, in the Home, and on the Job, 246
To Make the School Year 1957–58 Successful, 219
To You and Yours, 12
Uncommon Altruism, 12
Vocational Education in Pakistan, 246
Week or Two Before Christmas, The, 12
What to Do in Case of Fire, 122
Worthwhile Club Work, 40
Your New Permanent Address, 184

Electricity
Bookholder, M. L. Zanco, 333
Electric Wiring Board, Bernard Myers, 198
General Metal, Electricity, and Ceramics Shops, Ralph O. Gallington, 66
Isolated A.C.-D.C. Supply, An, George P. Pearce, 15
Lamp Building Project, Normand Methot, 233
Length of Wire on a Spool, George P. Pearce, 138
Multiple Electrical Teaching Aid, Clarence Parry, 259
Plastic Tumbler Lamp, Alvin R. Lappin, 326
Portable Space Heater, M. D. Roberts and W. O. Satterley, 302
Pseudo-Ebony Lamp Base, Richard M. Birch, 126
Radio, TV, and Electronics Shop, Jack B. Brown, 63
Record Player for the General Shop, A, M. D. Roberts and W. O. Satterley, 163
Shop Kink to Be Used on Wood Lamps, A, V. C. Knepper, 16
Wishing Well TV Lamp, Brother Leo Geiger, C.S.C., 324

Exhibits
It Pays to Display, Arthur A. Dick, 120

Farm Shop
New Facilities in Vocational Agriculture, Harry T. Miller, 85

General Shop and Home Mechanics
Experience in Co-operative Shop Planning, An, Robert D. Brown, 76

Guidance (Vocational Education, etc.)
Evaluation of Industrial Arts Guidance Services, Warren M. and Wallace M. Maurer, 317

Hobbies
Whittling Project — Mourning Dove, Ben Hunt, 327
Whittling Project — Trumpeter Swan, Ben Hunt, 295
Whittling Project — Woodcock, Ben Hunt, 254

Industrial Arts
". . . And the Problems of Life Related to These Changes," Carl Gerbracht and Frank A. Scholfield, 113
Doctor's and Master's Degrees with Theses in Industrial Education 1930 to 1955, Ray C. Doane and H. H. London, 115
Evaluation of Industrial Arts Guidance Services, Warren M. and Wallace M. Maurer, 317
Exchange Unit Between Shop and Homemaking Classes, James Crawford, 95
Ford Industrial Arts Awards, The, 217
Increasing High School Industrial-Arts Enrollment, John E. Cogoli, 34
Industrial Arts and Consumer Education, Garfield Burnham, 149
Industrial Arts and Public Relations, D. F. Cantrell, 275
Industrial Arts in Puerto Rico, Ferdinand F. Rossi, 214
Industrial Arts in the Education of Delinquents, Norman W. Bedwell, 148
Industrial Arts Inventory and Purchasing, Jules Bertin, 143
Industrial-Arts Shop Potential, The, Alexander F. Bick, 269
Industrial Education in Harford County, Md., John R. Walker, 145
Integrated Industrial-Arts Program for the Junior High Schools, An, Donald L. Lippold, 37
Mass Production Technique of Teaching Industry, The, Harvey Schaffer, 309
Mid-Term and Final Reviews, E. J. Terrell, 183
New Approach to Library Book Selection, A, Bert Mason, 8
New Experiment for Industrial Arts, A, Alexander F. Bick, 158
Open House for the Faculty, John A. Hielsberg, 156
Organization — The Key to Good Discipline, Fred A. Olsen, 174
Outside-of-School Industrial-Arts Assignments, Bernard Wray, 32A (May)
Potentialities of a Pupil Personnel Organization, Donald G. Lux and Edward R. Towers, 152
Program in Manual Arts Therapy, A, Robert E. Smith, 281
Project Design for Shop Teachers, Alexander F. Bick, 125
Rubber Stamp Vulcanizing Press, Robert W. Cynar, 278
TV's Challenge to Industrial Arts, Robert V. Esmond, 242
Versatility of Basic Shop Materials, The, Alexander F. Bick, 14

What Can We Do for Slow Learners in Industrial Education, Arthur A. Dick, 117
What Students Think of Industrial Arts, Ralph C. Mayo, 19
Word About the College Degree, A, Everett R. Miller, 92

Leatherwork

Leather Parade Vest, Stan Schirmacher, 218
Pocket Saver, Arthur O. Berry, 171

Machine Shop

Combination Miter Box and Gluing Jig, Robert Gallamore, 192
Conversion Table for Drill Press, John E. Reilly, 335
Permastop — Sink Stopper, Alfred Grayshon, 298
Radius Tool Holder, Alfred Grayshon, 24
Soldering Iron, Harold V. Johnson, 199
Special Tailstock Nuts, Alfred Grayshon, 336
Steak Hammer, Harold V. Johnson, 203
Teaching Thread Cutting on the Engine Lathe, Glen M. Larsen, 98
Workable Plan for Your Shop, A, John E. Reilly, 337

Metalwork

Add Enameling to Your Metal Shop, Francis J. Kafka, 289
Art-Metal Projects, Emerson Wm. Manzer, 268
Bookholder, M. L. Zanco, 333
Brass Fireplace Set, Charles Johansen, 293
Copper Enameling by Air-Acetylene Torch, Peter T. McKinney, 168, 187
Copper Trimmed Humidor, Dick Hutchinson, 53
Darkroom Press, John Emmel, 52
Fly-Spinner Case, C. Wayne Close, 228
Foundry in the General Shop, A, Ray Walsh and C. P. Kotowicz, 179
General Metal, Electricity, and Ceramics Shops, Ralph O. Gallington, 66
Gibault Tie Rack, The, Brother Leo Geiger, C.S.C., 16
Golf Bag Cart, Byron E. Graber, 160
Hanging Floral Garden, Ash Barto, 131
Leg Exerciser, Geo. N. Duerksen, 305
Modern Bud Vases, Jack A. Berge, 191
Modern Candleholders, Salt and Pepper Shakers, and Hors d'oeuvre Holder, Elmer B. Mattson, 256
Modern Tie Clasp, Edward David Fox, 264
Music Stand, Herbert W. Yankee, 173
Personalized Book Ends, Richard M. Birch, 202
Portable Space Heater, M. D. Roberts and W. O. Satterley, 302
Pouring Aid, Alfred Grayshon, 26
Real Look in TV Foot Stools, The, Charles McGill, 296
Record Player for the General Shop, A, M. D. Roberts and W. O. Satterley, 163
Reindeer Candleholder, Chester E. Vonsavage, 261
Sheet Metal Birdhouse, Herbert W. Yankee, 55
Sheet Metal Wall Ties and/or Paint Paddles, B. Harry Gunderson, 329
Soldering Iron, Harold V. Johnson, 199
Steak Hammer, Harold V. Johnson, 203
Time Capsule Fabricated in School, 123
Utility Table, Ruthford E. Smuts, 264
Vertical Metal Storage Rack, Donald L. Bilek, 234
Wrought Iron Candelabra, C. Wayne Close, 17

Methods

Mass Production Technique of Teaching Industry, The, Harvey Schaffer, 309

Posters

The Wood We Use, Edward Remick, 232

Printing

Graphic Arts Shop, Ralph O. Gallington, 72
Increasing High School Industrial-Arts Enrollment, John E. Cogoli, 34
Making a Checkerboard, Francis J. Kafka, 17
Pocket Silk-Screen Printing Unit, A, Francis J. Kafka, 195
Rubber Stamp Vulcanizing Press, Robert W. Cynar, 278
Sponsor a Print Shop Open House, Gordon R. Maves, 239
Third Graders Visit a Print Shop, Ernest J. Leal, 333

Public Relations

Industrial Arts and Public Relations, D. F. Cantrell, 275
It Pays to Display, Arthur A. Dick, 120
Open House for the Faculty, John A. Hielsberg, 156

Radio, Television, and Electronics

Radio, TV, and Electronics Shop, Jack B. Brown, 63
Record Player for the General Shop, A, M. D. Roberts and W. O. Satterley, 163
TV's Challenge to Industrial Arts, Robert V. Esmond, 242

Related Work

Cost Reduction Charts, Richard E. Shafer, 135
Don't Lift It Alone, W. Schweisheimer, 244
English Yew, Orville A. Oaks, 251
Methods of Teaching Related Information, Lewis Mallow, Jr., 35
Paper Birch, Orville A. Oaks, 338
Poplar, the People's Tree, Orville A. Oaks, 185
Printing "Impressions" of the Middle East, Thomas S. Weir, 287
Reading Problem, a Vocational Shop Teacher's Responsibility, The, Lyman J. Laughton, 240
Rowan or Mountain Ash, Orville A. Oaks, 234
Survival or Annihilation, Thomas A. Hippaka, 205

Research Studies

Interpretation of Industrial Arts in the School Community, Hilary Blanton Ford, 112
Survey of Students' Needs and Interests, Ralph C. Mayo, 36

Safety

Car Inspection for Safety, William B. LaPorte, 20A (November)
Don't Lift It Alone, W. Schweisheimer, 244
Safety Contests Sponsored by the Industrial-Arts Department, John Hurley, 277
Sign for Driver Training Cars, A, Robert D. Hogan, 103

School and Shop Utilities

Clamp Rack, A, Alfred E. Owens, 94
Keep Shavings Out of Motor, E. V. Reyner, 56
Making a Masking Tape Board, Stanley D. Roes, 56
Seat for Open Frame Work Benches, George V. Cardinale, 26
Small Parts Cabinet for the School or Home Shop, A, J. Henry Schroeder, 301
Soldering Iron, Harold V. Johnson, 199
Stand for Holding Wire Brads and Nails, F. N. Newton, Jr., 204
Tilt-Top Demonstration Bench, J. W. Weeks and Michael Loftus, 50
Wall Tool Cabinet, V. E. Broadbent, 196

Shop Management

Checking Out Bulletin for Teachers, John F. Donovan, 173
Four-Year Follow-Up Chart, Stanley Toloczko, 225
Give the Students a Good Start, Robert H. Williams, 216
Industrial Arts Inventory and Purchasing, Jules Bertin, 143
Shop Organization Aid, Robert Y. Eckels, 290
Shop Revenue Collection Sheet, Donald D. Chartraw, 232
Source of Teaching Material for Industrial Education Subjects, Withro McEnge, 33

Shop Planning

Are We Planning Functional School Shops?, J. H. Douglass, 82
Clamp Rack, A, Alfred E. Owens, 94
College Trade Department Takes Inventory, A, W. W. Ludeman, 88
Community High School Shop, C. H. Bergman, 75
Don Bosco Trade School, Rev. Eugene Palumbo, 10
Experience in Co-operative Shop Planning, An, Robert D. Brown, 76
General Metal, Electricity, and Ceramics Shops, Ralph O. Gallington, 66
General Woods and Crafts, Ralph O. Gallington, 80
Glue Area, John C. McCrory, 298
Graphic Arts Shop, Ralph O. Gallington, 72
Industrial Arts at Westville, Illinois, G. Kent Stewart, 266
New Dunbar Vocational High School, The, Clifford J. Campbell and Claybourne H. Norris, 57
New Junior High School Industrial Arts Buildings, William B. Steinberg, 67
Planned Tool Panel for the Auto Mechanics Area, A, John D. Ehrenborg, 193
Planning Industrial-Arts Shops at Ballston Spa, W. T. Jones and Joseph Fruehwirth, 73
Pueblo High School Shops, Herman R. Berlowe, 86
School Plant and Equipment, David Peyton, 93
Shop Layout for Addition to Defiance High School, Lester Riggle and Harry Manahan, 103
Tacoma Vocational School Addition, Karl B. Kluge, 4, 96
Vocational Education at Haverhill, Mass., Thomas Garvey, 105
Wall Tool Cabinet, V. E. Broadbent, 196

Sports, Games, Toys, Models, Camp Work, Archery

Duck Decoys, Ben Hunt, 220
Japanese Toy Elephant, Robert W. Innis, 201
Round Cribbage Board, E. A. Rerucha, 325
Ski Boom, Herbert A. Anderson, 229

Teacher Education

Administering Classroom Instruction in a Large Vocational School, Benjamin J. Novak, 247
Automation and Vocational Education, H. Robert Kinker, 175
Cost Reduction Charts, Richard E. Shafer, 135
Developments in Industrial Co-operative Teacher Education, Donald G. Lux, 1
Doctor's and Master's Degrees with Theses in Industrial Education, Ray C. Doane and H. H. London, 115
Greeting the New Seventh Grade Pupil, Mervyn T. Jones, 217
Industrial Arts and Consumer Education, Garfield Burnham, 149
Industrial Arts in the Education of Delinquents, Norman W. Bedwell, 148
Industrial Education in Harford County, Md., John R. Walker, 145
Methods of Teaching Related Information, Lewis Mallow, Jr., 35
Notable Shift in Leadership, A, William Thomas Bawden, 279
Objectives of an Auto Shop Program, A. C. Vasis, Jr., 208
Organization — The Key to Good Discipline, Fred A. Olsen, 174
Potentialities of a Pupil Personnel Organization, Donald G. Lux and Edward R. Towers, 152
Pre-Engineering Summer Workshop, R. E. Cochrane, 249
Problem of Graduate Study in Industrial Education, The, Heber A. Sotzin, 235
School Plant and Equipment, David Peyton, 93
Visible Progress in Teacher Education, Harold J. Miller, 312
What Can We Do for Slow Learners in Industrial Education, Arthur A. Dick, 117
Word About the College Degree, A, Everett R. Miller, 92

Teaching Aids

Drafting Pencil — A Teaching Aid, Stanley Ross, 52

Textiles

Textile Equipment, Tools, and Supplies, Robert McWilliams, 253

Upholstering

Real Look in TV Foot Stools, The, Charles McGill, 296

Visual Aids (Illustrative Materials and Visual Aids)

Multiple Electrical Teaching Aid, Clarence Parry, 259
Teaching-Aid Projects, Brother Leo Geiger, C.S.C., 311
Tilt-Top Demonstration Bench, J. W. Weeks and Michael Loftus, 50

Vocational Education

Administering Classroom Instruction in a Large Vocational School, Benjamin J. Novak, 247
Automation and Vocational Education, H. Robert Kinker, 175
Egypt Studies the U. S. System of Vocational Education, Louis M. Sasman, 32
Industrial Arts Inventory and Purchasing, Jules Bertin, 143
Industrial Education in Harford County, Md., John R. Walker, 145
Mid-Term and Final Reviews, E. J. Terrell, 183
Men Without Machines, Thomas S. Weir, 314
Occupational Information Technique, An, J. Henry Zanzalari, 119
Open House for the Faculty, John A. Hielsberg, 156
Potentialities of a Pupil Personnel Organization, Donald G. Lux and Edward R. Towers, 152
Reading Problem, A Vocational Shop Teacher's Responsibility, The, Lyman J. Laughton, 240
Selecting the Best Qualified for Carpentry Apprenticeships, W. F. Patterson, 101
Trade Exploration in Vocational School, Benjamin J. Novak, 29
Word About the College Degree, A, Everett R. Miller, 92

Woodworking (Patternmaking, Turning, Cabinetmaking, Carpentry, Wood Finishing)

Bench Hook, A, Filmore Gluck, 170
Bird Feeding Station, Louis Barocci, 55
Board Feet Calculator, V. E. Broadbent, 24
Brush Holder, Leonard Haskell, 47
Buy an Old House or Build?, Eldon W. Danne, 20A (November)
Cape Cod Cupola, Herbert W. Yankee, 330
Carving Mallets from Old Bowling Pins, Stewart E. Bakken, 200

Clamp Rack for the Woodshop, A, Albert A. Bettina, 233
Coffee Table, Rex Miller, 297
Colonial Step Stool, Michael Rhea, 323
Contemporary Coffee Tables with Magazine Space, Ronald Bacon, 133
Cookbook Holder, Athol R. Baily, 131
Curio Cabinet, David Peyton, 19
Drafting or Shop Stool, Percy Martins, 50
Duck Decoys, Ben Hunt, 220
English Yew, Orville A. Oaks, 251
Fly-Spinner Case, C. Wayne Close, 228
Footstool Sewing Cabinet, Donald D. Chartraw, 252
General Woods and Crafts, Ralph O. Gallington, 80
Hardboard, an Excellent Craft Medium, Dick Hutchinson, 273
Interesting Book Ends, Robert Swanson and Patrick Spielman, 258
Japanese Toy Elephant, Robert W. Innis, 201
Jet Wall Shelf, William Lee Hodge, 22
Lawn Chair, Waldemar E. Klammer, 263
Lazy Susan, Paul G. Hausman, 257
Machinist's Tool Chest, Louis Barocci, 18A (December)
Making a Masking Tape Board, Stanley D. Ross, 56
Mealtime Accessory, Jos. J. Lukowitz, 171
Modern Coffee Table, John W. Dawley, 262
Modern Tie Clasp, Edward David Fox, 264
Name Plate, Waldemar E. Klammer, 167
Night Stand, T. V. Darlington, 272
Operation Interest, K. T. Olsen, 137
Oriental Chopsticks, Robert W. Innis, 329
Paper Birch, Orville A. Oaks, 338
Poplar, the People's Tree, Orville A. Oaks, 185
Portable Lectern, D. C. Marshall, 332
Pseudo-Ebony Lamp Base, Richard M. Birch, 126
Queen Anne Coffee Tables, Roland Bacon, 128
Record Player for the General Shop, A, M. D. Roberts and W. O. Satterley, 163
Round Cribbage Board, E. A. Rerucha, 325
Rowan or Mountain Ash, Orville A. Oaks, 234
Sanding Block, A, George V. Cardinale, 23
Shaving Stand, Fred R. Thornton, 266
Ski Boom, Herbert A. Anderson, 229
Small Parts Cabinet for the School or Home Shop, A, J. Henry Schroeder, 301
Spice Cabinet, Claude E. Nihart, 306
Stand for Holding Wire Brads and Nails, F. N. Newton, Jr., 204
Successful Lumber Shorts Rack, A, Albert A. Bettina, 232
Tray of Wood, Wire, and Rope, A, James A. Hales, 271
Typical Specifications for a Residence — I, N. M. Pittman, 334
Use for Discarded Janitor Brushes, A, Patrick F. Boddy, 28
Watch Display Stand, Claude E. Nihart, 226
Whittling Project — Mourning Dove, Ben Hunt, 327
Whittling Project — Trumpeter Swan, Ben Hunt, 295
Whittling Project — Woodcock, Ben Hunt, 254
Wishing Well TV Lamp, Brother Leo Geiger, C.S.C., 324
Wood We Use, The, Edward Remick, 232

INDEX OF AUTHORS

A
Anderson, Herbert A., 211, 229

B
Bacon, Roland, 128, 133
Baily, Athol R., 131
Bakken, Stewart E., 200
Barocci, Louis, 55, 18A (December)
Barto, Ash, 131
Bawden, William Thomas, 279
Bedwell, Norman W., 148
Berge, Jack A., 191
Bergman, C. H., 75
Berlowe, Herman R., 86
Berry, Arthur O., 171
Bertin, Jules, 143
Bettina, Albert A., 232, 233
Bick, Alexander F., 14, 46, 125, 158, 269, 320
Bilek, Donald L., 234
Birch, Richard M., 126, 202
Boddy, Patrick F., 28
Broadbent, V. E., 24, 196
Brown, Jack B., 63
Brown, Robert D., 76
Burnham, Garfield, 149

C
Campbell, Clifford J., 57
Cantrell, D. F., 275
Cardinale, George V., 23, 26
Chartraw, Donald D., 232, 252
Close, C. Wayne, 17, 228
Cochrane, R. E., 249
Cogoli, John E., 34
Crawford, James, 95
Cullimore, Clarence, 286
Cynar, Robert W., 278

D
Danne, Eldon W., 20A (November)
Darlington, T. V., 272
Dawley, John W., 262
Dick, Arthur A., 117, 120
Doane, Ray C., 115
Donovan, John F., 173
Douglass, J. H., 82
Duerksen, Geo. N., 305

E
Eckels, Robert Y., 290
Ehrenborg, John D., 193
Emmel, John, 52
Enos, Louis J., 22, 26A (March)
Esmond, Robert V., 242

F
Ford, Hilary Blanton, 112
Fox, Edward David, 264
Fruehwirth, Joseph, 73

G
Gallamore, Robert, 192
Gallington, Ralph O., 66, 72, 80
Garvey, Thomas, 105
Geiger, Leo, Brother, C.S.C., 16, 311, 324
Gerbracht, Carl, 113
Gluck, Filmore, 170
Goulder, Robert A., 282
Graber, Byron E., 160
Grayshon, Alfred, 24, 26, 298, 336
Gunderson, B. Harry, 329

H
Hales, James A., 271
Hanks, William S., 114
Harrington, Walter H., 49
Haskell, Leonard, 47
Hausman, Paul G., 257
Hielsberg, John A., 156
Hippaka, Thomas A., 205
Hodge, William Lee, 22
Hogan, Robert D., 103
Hunt, Ben, 220, 254, 295, 327
Hurley, John, 277
Hutchinson, Dick, 53, 273

I
Innis, Robert W., 201, 329

J
Johansen, Charles, 293
Johnson, Harold V., 199, 203
Jones, Mervyn T., 217
Jones, W. T., 73

K
Kafka, Francis, J., 17, 195, 289
Kinker, H. Robert, 175
Klammer, Waldemar E., 167, 263
Kluge, Karl B., 4, 96
Knepper, V. C., 16
Kotowicz, C. P., 179

L
LaPorte, William B., 20A (November)
Lappin, Alvin R., 326
Larsen, Glen M., 98
Laughton, Lyman J., 240
Leal, Ernest J., 333
Lewis, William L., 41
Lippold, Donald L., 37
Loftus, Michael, 50
London, H. H., 115
Ludeman, W. W., 88
Lukowitz, Jos. J., 171
Lux, Donald G., 1, 152

M
Mallow, Lewis, Jr., 35
Manahan, Harry, 103
Manzer, Emerson Wm., 268
Marino, Al, 39, 48
Marshall, D. C., 332
Martins, Percy, 50
Mason, Bert, 8
Mattson, Elmer B., 256
Mattson, Homer A., 7
Maurer, Wallace M., and Warren M., 317
Maves, Gordon R., 239
Mayo, Ralph C., 19, 36
McCrory, John C., 298
McEnge, Withro, 33
McGill, Charles, 296
McKinney, Peter T., 168, 187
McWilliams, Robert, 253
Methot, Normand, 233
Miller, Everett R., 92
Miller, Harold J., 312
Miller, Harry T., 85
Miller, Rex, 297
Minter, Thomas J., 229
Myers, Bernard, 198

N
Newton, F. N., Jr., 204
Nihart, Claude E., 226, 306
Norris, Claybourne H., 57
Novak, Benjamin J., 29, 247

O
Oaks, Orville A., 185, 234, 251, 338
Olsen, Fred A., 174, 307
Olsen, K. T., 137
Owens, Alfred E., 94

P
Palumbo, Eugene, Rev., 10
Parry, Clarence, 259
Patterson, W. F., 101
Pearce, George P., 15, 138
Peyton, David, 19, 93
Pittman, N. M., 334

R
Reilly, John E., 335, 337
Remick, Edward, 232
Rerucha, E. A., 325
Reyner, E. V., 56
Rhea, Michael, 323
Riggle, Lester, 103
Roberts, M. D., 163, 302
Ross, Stanley, 52, 56
Rossi, Ferdinand F., 214

S
Sasman, Louis M., 32
Satterley, W. O., 163, 302
Schaffer, Harvey, 309
Schirmacher, Stan, 218
Scholfield, Frank A., 113
Schroeder, J. Henry, 301
Schweisheimer, W., 244
Shafer, Richard E., 135
Smith, Robert E., 281
Smuts, Ruthford E., 264
Sotzin, Heber A., 235
Spielman, Patrick, 258
Steinberg, William B., 67
Stewart, G. Kent, 266
Stott, Calvin T., 285
Swanson, Robert, 258

T
Terrell, E. J., 183
Thornton, Fred R., 266
Toloczko, Stanley, 225
Towers, Edward R., 152

V
Vasis, A. C., Jr., 208
Verkade, Andrew, 13
Vonsavage, Chester E., 261

W
Walker, John R., 145
Walsh, Ray, 179
Weeks, J. W., 50
Weir, Thomas S., 287, 314
Williams, Robert H., 216
Wray, Bernard, 32A (May)
Wright, Lawrence S., 123, 151, 182, 218, 226, 291, 316

Y
Yankee, Herbert W., 55, 173, 330

Z
Zanco, M. L., 333
Zanzalari, J. Henry, 119